

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION

VI TECHNOLOGIES, LLC,

*Plaintiff,*

v.

LG ELECTRONICS INC. and LG  
ELECTRONICS U.S.A., INC.,

*Defendants.*

Civil Action No. 6:21-cv-00314-ADA

JURY TRIAL DEMANDED

**LG ELECTRONICS INC.'S ANSWER TO PLAINTIFF'S  
COMPLAINT FOR PATENT INFRINGEMENT**

Defendant LG Electronics Inc. ("LGEKR") by and through its undersigned counsel of record and for its Answer to the Complaint of VI Technologies, LLC ("VI" or "Plaintiff") herein state as follows:

**PARTIES**

1. VI is a corporation filed under the laws of the State of Texas, with its principal place of business at 7800 Washington Avenue, Suite 700, Houston, TX 77007.

**ANSWER:** LGEKR lacks knowledge or information sufficient to form a belief as to the truth of the allegations set forth in Paragraph 1 and therefore denies them.

2. Defendant LG Electronics Inc. ["LGE"] is a corporation organized and existing under the laws of the Republic of Korea. It has its principal place of business at LG Twin Towers, 128 Yeouidaero, Yeongdungpo-gu, Seoul, South Korea. LGE designs, manufactures, makes, uses, imports into the United States, sells, and/or offers for sale in the United States LGE smartphones and tablets. LGE's smartphones and tablets are marketed, used, offered for sale, and/or sold throughout the United

States, including within this district.

**ANSWER:** LGEKR admits that it is a corporation organized under the laws of South Korea with a principal place of business at LG Twin Towers, 128 Yeouidaero, Yeongdungpo-gu, Seoul, 07366, South Korea. LGEKR denies the remaining allegations in Paragraph 2.

3. Defendant LG Electronics U.S.A. [“LG USA”], Inc. is a corporation organized under the laws of the State of Delaware. It has a principal place of business at 1000 Sylvan Avenue Englewood Cliffs, New Jersey 07632. LG USA is a wholly owned subsidiary of LGE and oversees domestic sales and distribution of LG’s consumer electronics products, including the products accused of infringement in this case.

**ANSWER:** LGEKR admits that LG Electronics U.S.A., Inc. (“LGEUS”) is a corporation organized under the laws of Delaware. LGEKR admits that LGEUS is a wholly owned subsidiary of LGEKR. LGEKR further admits that LGEUS imports, sells, and offers for sale LG-branded products in the United States. LGEKR denies the remaining allegations in Paragraph 3.

### **JURISDICTION AND VENUE**

4. VI repeats and re-alleges the allegations in Paragraphs 1-3 as though fully set forth in their entirety.

**ANSWER:** LGEKR repeats and re-alleges its answers to Paragraphs 1-3 of the Complaint.

5. LG is subject to this Court’s specific and general personal jurisdiction due at least to LG’s substantial business in this forum, including (i) at least a portion of the infringements alleged herein or (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct, or deriving substantial revenue from goods and services provided to individuals in Texas and in this district.

**ANSWER:** Paragraph 5 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR does not challenge this Court’s personal jurisdiction in this

lawsuit. LGEKR denies that it has committed any acts of infringement within this District or any other district. LGEKR denies the remaining allegations in Paragraph 5.

6. Specifically, LG intends to and does business in Texas, directly or through intermediaries and offers its products or services, including those accused herein of infringement, to customers and potential customers located in Texas, including in the Western District of Texas.

**ANSWER:** Denied.

7. LG USA maintains a regular and established place of business in this District, including at 9420 Research Blvd, Austin, Texas 78759, and a representative office at 9600 Great Hills Trail, Suite 150W, Austin, Texas 78759. LG USA maintains additional regular and established places of business at 21251-2155 Eagle Parkway, Fort Worth, Texas 76177 and 14901 Beach St, Fort Worth, TX 76177. LG USA may be served with process through its registered agent for service in Texas: United States Corporation Co. 211 E. 7th Street, Suite 620, Austin, Texas 78701.

**ANSWER:** LGEKR is without knowledge or information sufficient to form a belief as to the truth of the allegation that LGEUS may be served with process through a registered agent at the agent and address alleged. LGEKR denies that it has places of business at 9420 Research Blvd, Austin, TX 78759; 9600 Great Hills Trail, Suite 150W, Austin, TX 78759; 21251-2155 Eagle Parkway, Fort Worth, TX 76177; or 14901 Beach St, Fort Worth, TX 76177. LGEKR denies the remaining allegations in Paragraph 7.

8. Venue is proper against LGE pursuant to 28 U.S.C. § 1391(c)(3) because venue is proper in any judicial district against a foreign corporation. *See In re HTC Corp.*, 889 F.3d 1349, 1354 (Fed. Cir. 2018).

**ANSWER:** Paragraph 8 contains legal conclusions to which no response is required. To the extent a response is required and for purposes of this action, LGEKR denies the allegations in Paragraph 8.

9. Venue is proper against LG USA in this District pursuant to 28 U.S.C. § 1400(b) because it has maintained established and regular places of business in this District and has committed acts of patent infringement in the District. *See In re Cray Inc.*, 871 F.3d 1355, 1362- 63 (Fed. Cir. 2017).

**ANSWER:** Paragraph 9 contains legal conclusions to which no response is required. To the extent a response is required and for purposes of this action, LGEKR denies the allegations in Paragraph 9. Specifically, pursuant to Fed. R. Civ. P. 12(b)(3), LGEKR objects to venue as improper in this judicial district under 28 U.S.C. § 1400(b) because LGEUS is not incorporated in the State of Texas, and LGEUS does not have a regular and established place of business in this judicial district.

#### **THE TECHNOLOGY**

10. VI repeats and re-alleges the allegations in Paragraphs 1-9 as though fully set forth in their entirety.

**ANSWER:** LGEKR repeats and re-alleges its answers to Paragraphs 1-9 to the Complaint.

11. For seventeen years, Texas-based VI has been an innovator and industry thought-leader in mapping software and sensor technologies.

**ANSWER:** LGEKR is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 11 and therefore denies them.

12. VI manufactures and sells digital geoimaging technology, including, but not limited to, systems for aerial surveying.

**ANSWER:** LGEKR is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 12 and therefore denies them.

13. VI provides a platform for the development of world-class metric 3D sensor solutions and information delivery workflows for large airborne systems, drones, and mobile applications.

**ANSWER:** LGEKR is without knowledge or information sufficient to form a belief as to the

truth of the allegations of Paragraph 13 and therefore denies them.

14. VI has been awarded fourteen United States patents in the fields of aerial surveying, survey data processing and data management, and mapping systems. VI has also been awarded numerous international patents on its ground-breaking technologies.

**ANSWER:** LGEKR is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 14 and therefore denies them.

15. Using the principles of computer vision and photogrammetry, VI's patented technology transforms an array of cameras into a wide field image with accurate 3D measurementsystems and brings ultra-high-definition capabilities to numerous industries.

**ANSWER:** LGEKR is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 15 and therefore denies them.

16. The patents-in-suit, U.S. Patent Nos. 6,928,194 (the "'194 patent"), 7,725,258 (the "'258 patent"), 7,925,114 (the "'114 patent"), 8,483,960 (the "'960 patent"), 9,389,298 (the "'298 patent"), 9,797,980 (the "'980 patent) (collectively, the "Asserted Patents"), are generally directedto systems and methods for collection of image data using a plurality of sensors and for processingthe collected image data to generate high quality output images.

**ANSWER:** LGEKR admits that Plaintiff's Complaint purports to concern U.S. Patent Nos. 6,928,194 (the "'194 patent"), 7,725,258 (the "'258 patent"), 7,925,114 (the "'114 patent"), 8,483,960 (the "'960 patent"), 9,389,298 (the "'298 patent"), 9,797,980 (the "'980 patent) (collectively, the "Asserted Patents"). LGEKR is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 16 and therefore denies them.

### **THE ACCUSED PRODUCTS**

17. VI repeats and re-alleges the allegations in Paragraphs 1-16 as though fully set forth in their entirety.

**ANSWER:** LGEKR repeats and re-alleges its answers to Paragraphs 1-16 to the Complaint.

18. LG infringes the asserted [patents] by making, using, selling, offering to sell, and importing its smartphones and tablets. Exemplary accused smartphones and tablets include, but are not limited to, the LG G Pad F 8.0 2nd Gen ACG, LG G Pad 5 10.1, LG Wing, LG G8X ThinQ, LG G8 ThinQ, LG Q70, LG Stylo 6, LG K51, LG K31, LG Stylo 5, LG Dual Screen for LG Velvet 5G, LG K31 Rebel, LG K92, LG Velvet 5G, LG Velvet 5G UW, LG V60 ThinQ, LG V50 ThinQ, LG V30, LG V40, LG V50, LG V35 ThinQ, LG V40 ThinQ, LG G7 ThinQ, LG G6, LG V20, LG Xpression Plus 3, and LG Phoenix 5 (collectively the “Accused Products”).

**ANSWER:** LGEKR admits it makes smartphones and tablets outside of the United States. LGEKR denies that it has committed any acts of patent infringement. LGEKR denies the remaining allegations in Paragraph 18.

19. The Accused Products include a global positioning transmitter and global positioning antenna, which perform positioning functions and measure altitude.

**ANSWER:** Paragraph 19 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 19.

20. The Accused Products include an attitude indicator, e.g., a gyro.

**ANSWER:** Paragraph 20 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 20.

21. The Accused Products include one or more cameras, each including one or more image sensors. The image sensors generate representations of subject surfaces or areas.

**ANSWER:** LGEKR admits that the Accused Products include one or more cameras. In addition, LGEKR admits that the Accused Products include one or more image sensors. The remaining allegations in Paragraph 21 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the remaining allegations in Paragraph 21.

22. The Accused Products use information received by global positioning systems and gyros, among other information, to correlate data collected from an image sensor to a position on a surface.

**ANSWER:** LGEKR admits that the Accused Products is capable of receiving information from global positioning systems. The remaining allegations in Paragraph 22 contains legal conclusions to which no response is required. To the extent a response is required and unless otherwise expressly admitted, LGEKR denies the remaining allegations in Paragraph 22.

23. The Accused Products also include image processing features that assist in merging or fusing images taken from multiple image sensors into a single high-quality image.

**ANSWER:** LGEKR admits that the Accused Products include image processing capabilities. The remaining allegations in Paragraph 23 contains legal conclusions to which no response is required. To the extent a response is required and unless otherwise expressly admitted, LGEKR denies the remaining allegations in Paragraph 23.

## **COUNT I**

### **DIRECT INFRINGEMENT OF U.S. PATENT NO. 6,928,194**

24. VI repeats and re-alleges the allegations in Paragraphs 1-23 as though fully set forth in their entirety.

**ANSWER:** LGEKR repeats and realleges its answers to Paragraphs 1-23 to the Complaint.

25. VI owns all substantial rights, interest, and title in and to the '194 patent, including the sole and exclusive right to prosecute this action and enforce the '194 patent against infringers, and to collect damages for all relevant times. The United States Patent and Trademark Office duly issued the '194 patent on August 9, 2005. A copy of the '194 patent is attached as Exhibit A.

**ANSWER:** LGEKR admits that the '194 patent states on its cover a purported issue date of August 9, 2005. LGEKR admits that Exhibit A purports to be a copy of the '194 patent. LGEKR lacks

knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 25 and therefore denies them.

26. The '194 patent is entitled "System For Mosaicing Digital Ortho-Images." The '194 patent describes methods of rendering high-resolution digital images.

**ANSWER:** LGEKR admits that the '194 patent is titled "System For Mosaicing Digital Ortho-Images." LGEKR lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 26 and therefore denies them.

27. The claims of the '194 patent are not directed to an abstract idea and they recite an inventive concept.

**ANSWER:** Paragraph 27 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 27.

28. The written description of the '194 patent describes in technical detail each of the limitations of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art at the time of the invention.

**ANSWER:** Paragraph 28 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 28.

29. LG has infringed and continues to infringe the '194 patent by making, having made, using, importing, providing, supplying, distributing, selling, or offering the Accused Products for sale.

**ANSWER:** Denied.

30. The Accused Products perform a method of maintaining a desired image intensity in an imaging system.

**ANSWER:** Paragraph 30 contains legal conclusions to which no response is required. To the



extent a response is required, LGEKR denies the allegations in Paragraph 30.

31. The Accused Products evaluate a target image captured by the imaging system to identify green-dominant pixels in the target image.

**ANSWER:** Paragraph 31 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 31.

32. The Accused Products determine an average intensity of the target image based on the green-dominant pixels.

**ANSWER:** Paragraph 32 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 32.

33. The Accused Products evaluate the difference between the average intensity and the desired image intensity.

**ANSWER:** Paragraph 33 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 33.

34. The Accused Products adjust exposure time of the imaging system responsive to the difference between the average intensity and the desired image intensity.

**ANSWER:** Paragraph 34 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 34.

35. As described above, LG has directly infringed (literally or under the doctrine of equivalents) at least claim 1 of the '194 patent. LG's infringement in this regard is ongoing.

**ANSWER:** Denied.

36. LG has induced end-users and other third parties to directly infringe (literally or under the doctrine of equivalents) the '194 patent by using the Accused Products. LG took active steps, directly or through contractual relationships with others, with the specific intent to cause them to use the Accused Products in a manner that infringes one or more claims of the '194 patent, including, for

example, claim 1 of the '194 patent. Such steps by LG included, among other things: advising or directing end-users and other third parties to use the Accused Products in an infringing manner; advertising and promoting the use of the Accused Products in an infringing manner; or distributing instructions that guide end-users and other third parties to use the Accused Products in an infringing manner. LG performed these steps, which constitute induced infringement with the knowledge of the '194 patent and with the knowledge that the induced acts constitute infringement. LG was aware that the normal and customary use of the Accused Products by others would infringe the '194 patent.

**ANSWER:** Denied.

37. LG has knowledge of the '194 patent at least as of the date when it was notified of the filing of this action.

**ANSWER:** LGEKR admits that it first obtained knowledge of the '194 patent when it was notified of the filing of this action.

38. Furthermore, on information and belief, LG has a policy or practice of not reviewing the patents of others (including instructing its employees to not review the patents of others), and thus has been willfully blind of Plaintiff's patent rights.

**ANSWER:** Paragraph 38 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 38.

39. LG's actions are at least objectively reckless as to the risk of infringing a valid patent and this objective risk was either known or should have been known by LG.

**ANSWER:** Paragraph 39 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 39.

40. LG's direct and indirect infringement of the '194 patent is, has been, and continues to be willful, intentional, deliberate, or in conscious disregard of Plaintiff's rights under the patent.

**ANSWER:** Denied.

41. Plaintiff and/or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '194 patent.

**ANSWER:** Paragraph 41 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 41.

42. Plaintiff has been damaged as a result of the infringing conduct by LG alleged above. Thus, LG is liable to VI in an amount that compensates it for such infringement, which bylaw cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

**ANSWER:** Denied.

43. VI has suffered irreparable harm, through its loss of market share and goodwill, for which there is no adequate remedy at law. VI has and will continue to suffer this harm by virtue of LG's infringement of the '194 patent. LG's actions have interfered with and will interfere with VI's ability to license technology. The balance of hardships favors VI's ability to commercialize its own ideas and technology. The public interest in allowing VI to enforce its right to exclude outweighs other public interests, which supports injunctive relief in this case.

**ANSWER:** Denied.

## **COUNT II**

### **DIRECT INFRINGEMENT OF U.S. PATENT NO. 7,725,258**

44. VI repeats and re-alleges the allegations in Paragraphs 1-43 as though fully set forth in their entirety.

**ANSWER:** LGEKR repeats and re-alleges the allegations in Paragraphs 1-43 to the Complaint.

45. VI owns all substantial rights, interest, and title in and to the '258 patent, including the sole and exclusive right to prosecute this action and enforce the '258 patent against infringers, and to

collect damages for all relevant times. The United States Patent and Trademark Office duly issued the '258 patent on May 25, 2010. A copy of the '258 patent is attached as Exhibit B.

**ANSWER:** LGEKR admits that the '258 patent states on its cover a purported issue date of May 25, 2010. LGEKR admits that Exhibit B purports to be a copy of the '258 patent. LGEKR lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 45 and therefore denies them.

46. The '258 patent is entitled "Vehicle Based Data Collection And Processing System And Imaging Sensor System And Methods Thereof." The '258 patent describes data collection and processing systems.

**ANSWER:** LGEKR admits that the '258 patent is titled "Vehicle Based Data Collection And Processing System and Imaging Sensor System and Methods Thereof." LGEKR lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 46 and therefore denies them.

47. The claims of the '258 patent are not directed to an abstract idea and they recite an inventive concept.

**ANSWER:** Paragraph 47 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 47.

48. The written description of the '258 patent describes in technical detail each of the limitations of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art at the time of the invention.

**ANSWER:** Paragraph 48 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 48.

49. LG has infringed and continues to infringe the '258 patent by making, having made, using, importing, providing, supplying, distributing, selling, or offering the Accused Products for sale.

**ANSWER:** Denied.

50. The Accused Products include a system for generating a map.

**ANSWER:** Paragraph 50 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 50.

51. The Accused Products include a global positioning receiver.

**ANSWER:** Paragraph 51 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 51.

52. The Accused Products include a vehicle in alignment with a target area.

**ANSWER:** Paragraph 52 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 52.

53. The Accused Products include an elevation measurement unit, in communication with the vehicle.

**ANSWER:** Paragraph 53 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 53.

54. The Accused Products include a global positioning antenna, in communication with the vehicle.

**ANSWER:** Paragraph 54 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 54.

55. The Accused Products include an attitude measurement unit, in communication with the vehicle.

**ANSWER:** Paragraph 55 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 55.

56. The Accused Products include an imaging sensor system, disposed to the vehicle.

**ANSWER:** Paragraph 56 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 56.

57. The imaging sensor system includes a rigid mount plate affixed to the vehicle.

**ANSWER:** Paragraph 57 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 57.

58. The imaging sensor system includes a first rigid mount unit affixed to the mount plate and having a first and second imaging sensor disposed within the first mount unit, wherein the first imaging and second imaging sensors each have a focal axis passing through an aperture in the first mount unit and the mount plate, wherein the first and second imaging sensors each generate a first array of pixels, wherein each array of pixels is at least two dimensional.

**ANSWER:** Paragraph 58 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 58.

59. The imaging sensor system includes a second rigid mount unit affixed to the mountplate and having a third imaging sensor disposed within the second mount unit.

**ANSWER:** Paragraph 59 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 59.

60. The imaging sensor system includes a computer in communication with the elevation measurement unit, the global positioning antenna, the attitude measurement unit, the first imaging sensor, and the second imaging sensor; correlating at least a portion of the image data from the first imaging sensor and the second imaging sensor to a portion of the target area based on input from one or more of: the elevation measurement unit, the global positioning antenna and the attitude measurement unit.

**ANSWER:** Paragraph 60 contains legal conclusions to which no response is required. To the

extent a response is required, LGEKR denies the allegations in Paragraph 60.

61. LG has induced end-users and other third parties to directly infringe (literally or under the doctrine of equivalents) the '258 patent by using the Accused Products. LG took active steps, directly or through contractual relationships with others, with the specific intent to cause them to use the Accused Products in a manner that infringes one or more claims of the '258 patent, including, for example, claim 1 of the '258 patent. Such steps by LG included, among other things, advising or directing end-users and other third parties to use the Accused Products in an infringing manner; advertising and promoting the use of the Accused Products in an infringing manner; or distributing instructions that guide end-users and other third parties to use the Accused Products in an infringing manner. LG performed these steps, which constitute induced infringement with the knowledge of the '258 patent and with the knowledge that the induced acts constitute infringement. LG was aware that the normal and customary use of the Accused Products by others would infringe the '258 patent.

**ANSWER:** Denied.

62. LG has knowledge of the '258 patent at least as of the date when it was notified of the filing of this action.

**ANSWER:** LGEKR admits that it first obtained knowledge of the '258 patent when it was notified of the filing of this action.

63. Furthermore, on information and belief, LG has a policy or practice of not reviewing the patents of others (including instructing its employees to not review the patents of others), and thus has been willfully blind of Plaintiff's patent rights.

**ANSWER:** Paragraph 63 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 63.

64. LG's actions are at least objectively reckless as to the risk of infringing a valid patent and this objective risk was either known or should have been known by LG.

**ANSWER:** Paragraph 65 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 64.

65. LG's direct and indirect infringement of the '258 patent is, has been, and continues to be willful, intentional, deliberate, or in conscious disregard of Plaintiff's rights under the patent.

**ANSWER:** Denied.

66. Plaintiff and/or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '258 patent.

**ANSWER:** Paragraph 66 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 66.

67. Plaintiff has been damaged as a result of the infringing conduct by LG alleged above. Thus, LG is liable to VI in an amount that compensates it for such infringement, which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

**ANSWER:** Denied.

68. VI has suffered irreparable harm, through its loss of market share and goodwill, for which there is no adequate remedy at law. VI has and will continue to suffer this harm by virtue of LG's infringement of the '258 patent. LG's actions have interfered with and will interfere with VI's ability to license technology. The balance of hardships favors VI's ability to commercialize its own ideas and technology. The public interest in allowing VI to enforce its right to exclude outweighs other public interests, which supports injunctive relief in this case.

**ANSWER:** Denied.

### **COUNT III**

#### **DIRECT INFRINGEMENT OF U.S. PATENT NO. 7,925,111**



69. VI repeats and re-alleges the allegations in Paragraphs 1-68 as though fully set forth in their entirety.

**ANSWER:** LGEKR repeats and re-alleges its answers to Paragraphs 1-68 to the Complaint.

70. VI owns all substantial rights, interest, and title in and to the '114 patent, including the sole and exclusive right to prosecute this action and enforce the '114 patent against infringers, and to collect damages for all relevant times. The United States Patent and Trademark Office duly issued the '114 patent on April 12, 2011. A copy of the '114 patent is attached as Exhibit C.

**ANSWER:** LGEKR admits that the '114 patent states on its cover a purported issue date of April 12, 2011. LGEKR admits that Exhibit C purports to be a copy of the '114 patent. LGEKR lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 70 and therefore denies them.

71. The '114 patent is entitled "System And Method For Mosaicing Digital Ortho-Images." The '114 patent describes methods of rendering high-resolution digital images.

**ANSWER:** LGEKR admits that the '114 patent is titled "System And Method For Mosaicing Digital Ortho- Images." LGEKR lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 71 and therefore denies them.

72. The claims of the '114 patent are not directed to an abstract idea and they recite an inventive concept.

**ANSWER:** Paragraph 72 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 72.

73. The written description of the '114 patent describes in technical detail each of the limitations of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art at the time of the

invention.

**ANSWER:** Paragraph 73 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 73.

74. LG has infringed and continues to infringe the '114 patent by making, having made, using, importing, providing, supplying, distributing, selling, or offering the Accused Products for sale.

**ANSWER:** Denied.

75. The Accused Products perform a method of mosaicing two overlapping digital input images together to form an output image.

**ANSWER:** Paragraph 75 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 75.

76. The Accused Products provide a reference image, comprising a number of green-dominant pixels having certain average color intensity and average elevation.

**ANSWER:** Paragraph 76 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 76.

77. The Accused Products provide a secondary image, comprising a number of green-dominant pixels having certain average color intensity and average elevation, that overlaps the reference image in an overlap area.

**ANSWER:** Paragraph 77 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 77.

78. The Accused Products scale pixel values of the secondary image within the overlap area such that the color intensity of the secondary image green-dominant pixels within the overlap area is equivalent to the average color intensity of the reference image green-dominant pixels within the overlap area.

**ANSWER:** Paragraph 79 contains legal conclusions to which no response is required. To the

extent a response is required, LGEKR denies the allegations in Paragraph 79.

79. The Accused Products select an initial seam line within the overlap area.

**ANSWER:** Paragraph 79 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 79.

80. The Accused Products determine a position of an elevated feature in a small segment of the overlapping area from a digital elevation model.

**ANSWER:** Paragraph 80 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 80.

81. The Accused Products establish the seam line within the overlap area, wherein the route of the seam line is altered based upon the position of an elevated feature.

**ANSWER:** Paragraph 81 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 81.

82. As described above, LG has directly infringed (literally or under the doctrine of equivalents) at least claim 1 of the '114 patent. LG's infringement in this regard is ongoing.

**ANSWER:** Denied.

83. LG has induced end-users and other third parties to directly infringe (literally or under the doctrine of equivalents) the '114 patent by using the Accused Products. LG took active steps, directly or through contractual relationships with others, with the specific intent to cause them to use the Accused Products in a manner that infringes one or more claims of the '114 patent, including, for example, claim 1 of the '114 patent. Such steps by LG included, among other things, advising or directing end-users and other third parties to use the Accused Products in an infringing manner; advertising and promoting the use of the Accused Products in an infringing manner; or distributing instructions that guide end-users and other third parties to use the Accused Products in an infringing manner. LG performed these steps, which constitute induced infringement with the knowledge of the

'114 patent and with the knowledge that the induced acts constitute infringement. LG was aware that the normal and customary use of the Accused Products by others would infringe the '114 patent.

**ANSWER:** Denied.

84. LG has knowledge of the '114 patent at least as of the date when it was notified of the filing of this action.

**ANSWER:** LGEKR admits that it first obtained knowledge of the '114 patent when it was first notified of the filing of this action.

85. Furthermore, on information and belief, LG has a policy or practice of not reviewing the patents of others (including instructing its employees to not review the patents of others), and thus has been willfully blind of Plaintiff's patent rights.

**ANSWER:** Paragraph 85 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 85.

86. LG's actions are at least objectively reckless as to the risk of infringing a valid patent and this objective risk was either known or should have been known by LG.

**ANSWER:** Paragraph 86 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 86.

87. LG's direct and indirect infringement of the '114 patent is, has been, and continues to be willful, intentional, deliberate, or in conscious disregard of Plaintiff's rights under the patent.

**ANSWER:** Denied.

88. Plaintiff and/or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '114 patent.

**ANSWER:** Paragraph 88 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 88.

89. Plaintiff has been damaged as a result of the infringing conduct by LG alleged above. Thus, LG is liable to VI in an amount that compensates it for such infringement, which bylaw cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

**ANSWER:** Denied.

90. VI has suffered irreparable harm, through its loss of market share and goodwill, for which there is no adequate remedy at law. VI has and will continue to suffer this harm by virtue of LG's infringement of the '114 patent. LG's actions have interfered with and will interfere with VI's ability to license technology. The balance of hardships favors VI's ability to commercialize its own ideas and technology. The public interest in allowing VI to enforce its right to exclude outweighs other public interests, which supports injunctive relief in this case.

**ANSWER:** Denied.

#### **COUNT IV**

##### **DIRECT INFRINGEMENT OF U.S. PATENT NO. 8,483,960**

91. VI repeats and re-alleges the allegations in Paragraphs 1-90 as though fully set forth in their entirety.

**ANSWER:** LEGKR repeats and re-alleges its answers to Paragraphs 1-90 to the Complaint.

92. VI owns all substantial rights, interest, and title in and to the '960 patent, including the sole and exclusive right to prosecute this action and enforce the '960 patent against infringers, and to collect damages for all relevant times. The United States Patent and Trademark Office duly issued the '960 patent on July 9, 2013. A copy of the '960 patent is attached as Exhibit D.

**ANSWER:** LGEKR admits that the '960 patent states on its cover a purported issue date of July 9, 2013. LGEKR admits that Exhibit D purports to be a copy of the '960 patent. LGEKR lacks

knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 92 and therefore denies them.

93. The '960 patent is entitled "Self-Calibrated, Remote Imaging And Data Processing System." The '960 patent describes data collection and processing systems.

**ANSWER:** LGEKR admits that the '960 patent is titled "Self-Calibrated, Remote Imaging And Data ProcessingSystem." LGEKR lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 93 and therefore denies them

94. The claims of the '960 patent are not directed to an abstract idea and they recite an inventive concept.

**ANSWER:** Paragraph 94 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 94.

95. The written description of the '960 patent describes in technical detail each of the limitations of the claims, allowing a skilled artisan to understand the scope of the claims and howthe non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art at the timeof the invention.

**ANSWER:** Paragraph 95 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 95.

96. LG has infringed and continues to infringe the '960 patent by making, having made, using, importing, providing, supplying, distributing, selling, or offering the Accused Products forsale.

**ANSWER:** Denied.

97. The Accused Products include a system for generating a map.

**ANSWER:** Paragraph 97 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 97.

98. The Accused Products include a global positioning receiver.

**ANSWER:** Paragraph 98 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 98.

99. The Accused Products include a vehicle in alignment with a target area.

**ANSWER:** Paragraph 99 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 99.

100. The Accused Products include an elevation measurement unit, in communication with the vehicle.

**ANSWER:** Paragraph 100 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 100.

101. The Accused Products include a global positioning antenna, in communication with the vehicle.

**ANSWER:** Paragraph 101 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 101.

102. The Accused Products include an attitude measurement unit, in communication with the vehicle.

**ANSWER:** Paragraph 102 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 102.

103. The Accused Products include an imaging sensor system, disposed to the vehicle.

**ANSWER:** Paragraph 103 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 103.

104. The imaging sensor system includes a rigid mount plate affixed to the vehicle.

**ANSWER:** Paragraph 104 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 104.

105. The imaging sensor system includes a first rigid mount unit affixed to the mount plate and has at least two imaging sensors disposed within the first mount unit, wherein a first imaging sensor and a second imaging sensor each has a focal axis passing through an aperture in the first mount unit and the mount plate, wherein the first and second imaging sensor each generates a first data array of pixels, wherein each data array of pixels is at least two dimensional, wherein the first and second imaging sensors are offset to have a first image overlap area in the target area, wherein the first sensor's image data bisects the second sensor's image data in the first image overlap area.

**ANSWER:** Paragraph 105 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 105.

106. The imaging sensor system includes a computer in communication with the elevation measurement unit, the global positioning antenna, the attitude measurement unit, the first imaging sensor, and the second imaging sensor, and correlates at least a portion of the image areas from the first imaging sensor and the second imaging sensor to a portion of the target area based on input from one or more of: the elevation measurement unit, the global positioning antenna, and the attitude measurement unit.

**ANSWER:** Paragraph 106 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 106.

107. As described above, LG has directly infringed (literally or under the doctrine of equivalents) at least claim 1 of the '960 patent. LG's infringement in this regard is ongoing.

**ANSWER:** Denied.

108. LG has induced end-users and other third parties to directly infringe (literally or under the doctrine of equivalents) the '960 patent by using the Accused Products. LG took active steps, directly or through contractual relationships with others, with the specific intent to cause them to use the Accused Products in a manner that infringes one or more claims of the '960 patent, including, for



example, claim 1 of the '960 patent. Such steps by LG included, among other things, advising or directing end-users and other third parties to use the Accused Products in an infringing manner; advertising and promoting the use of the Accused Products in an infringing manner; or distributing instructions that guide end-users and other third parties to use the Accused Products in an infringing manner. LG performed these steps, which constitute induced infringement with the knowledge of the '960 patent and with the knowledge that the induced acts constitute infringement. LG was aware that the normal and customary use of the Accused Products by others would infringe the '960 patent.

**ANSWER:** Denied.

109. LG has knowledge of the '960 patent at least as of the date when it was notified of the filing of this action.

**ANSWER:** LGEKR admits that it first obtained knowledge of the '960 patent when it was notified of the filing of this action.

110. Furthermore, on information and belief, LG has a policy or practice of not reviewing the patents of others (including instructing its employees to not review the patents of others), and thus has been willfully blind of Plaintiff's patent rights.

**ANSWER:** Paragraph 110 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 110.

111. LG's actions are at least objectively reckless as to the risk of infringing a valid patent and this objective risk was either known or should have been known by LG.

**ANSWER:** Paragraph 111 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 111.

112. LG's direct and indirect infringement of the '960 patent is, has been, and continues to be willful, intentional, deliberate, or in conscious disregard of Plaintiff's rights under the patent.

**ANSWER:** Denied.

113. Plaintiff and/or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '960 patent.

**ANSWER:** Paragraph 113 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 113.

114. Plaintiff has been damaged as a result of the infringing conduct by LG alleged above. Thus, LG is liable to VI in an amount that compensates it for such infringement, which bylaw cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

**ANSWER:** Denied.

115. VI has suffered irreparable harm, through its loss of market share and goodwill, for which there is no adequate remedy at law. VI has and will continue to suffer this harm by virtue of LG's infringement of the '960 patent. LG's actions have interfered with and will interfere with VI's ability to license technology. The balance of hardships favors VI's ability to commercialize its own ideas and technology. The public interest in allowing VI to enforce its right to exclude outweighs other public interests, which supports injunctive relief in this case.

**ANSWER:** Denied.

## **COUNT V**

### **DIRECT INFRINGEMENT OF U.S. PATENT NO. 9,389,298**

116. VI repeats and re-alleges the allegations in Paragraphs 1-115 as though fully set forth in their entirety.

**ANSWER:** LGEKR repeats and re-alleges its answers to Paragraphs 1-115 to the Complaint.

117. VI owns all substantial rights, interest, and title in and to the '298 patent, including the sole and exclusive right to prosecute this action and enforce the '298 patent against infringers, and to

collect damages for all relevant times. The United States Patent and Trademark Office duly issued the '298 patent on July 12, 2016. A copy of the '298 patent is attached as Exhibit E.

**ANSWER:** LGEKR admits that the '298 patent states on its cover a purported issue date of July 12, 2016. LGEKR admits that Exhibit E purports to be a copy of the '298 patent. LGEKR lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 117 and therefore denies them.

118. The '298 patent is entitled "Self-Calibrated, Remote Imaging And Data Processing System." The '298 patent describes data collection and processing systems.

**ANSWER:** LGEKR admits that the '960 patent is titled "Self-Calibrated, Remote Imaging And Data Processing System." LGEKR lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 92 and therefore denies them

119. The claims of the '298 patent are not directed to an abstract idea and they recite an inventive concept.

**ANSWER:** Paragraph 119 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 119.

120. The written description of the '298 patent describes in technical detail each of the limitations of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art at the time of the invention.

**ANSWER:** Paragraph 120 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 120.

121. LG has infringed and continues to infringe the '298 patent by making, having made, using, importing, providing, supplying, distributing, selling, or offering the Accused Products for sale.

**ANSWER:** Paragraph 121 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 121.

122. The Accused Products include a system for generating a map of a target area.

**ANSWER:** Paragraph 122 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 122.

123. The Accused Products include a global positioning receiver.

**ANSWER:** Paragraph 123 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 123.

124. The Accused Products include an elevation measurement unit, adaptably mountable to a vehicle.

**ANSWER:** Paragraph 124 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 124.

125. The Accused Products include a global positioning antenna, adaptably mountable to the vehicle.

**ANSWER:** Paragraph 125 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 125.

126. The Accused Products include an attitude measurement unit, adaptably mountable to the vehicle.

**ANSWER:** Paragraph 126 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 126.

127. The Accused Products include an imaging sensor system, adaptably mountable to the vehicle having a view of the target area.

**ANSWER:** Paragraph 127 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 127.

128. The imaging sensor system includes a rigid mount unit having at least two imaging sensors disposed within the mount unit, wherein a first imaging sensor and a second imaging sensor each has a focal axis passing through an aperture in the mount unit, wherein the first imaging sensor generates a first image area comprising a first data array of pixels and the second imaging sensor generates a second image area comprising a second data array of pixels, wherein the first and second imaging sensors are offset to have a first image overlap area in the target area, wherein the first sensor's image data bisects the second sensor's image data in the first image overlap area.

**ANSWER:** Paragraph 128 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 128.

129. The imaging sensor system includes a computer in communication with the elevation measurement unit, the global positioning antenna, the attitude measurement unit, the first imaging sensor, and the second imaging sensor; correlating at least a portion of the image areas from the first imaging sensor and the second imaging sensor to a portion of the target area based on input from one or more of: the elevation measurement unit, the global positioning antenna and the attitude measurement unit.

**ANSWER:** Paragraph 129 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 129.

130. As described above, LG has directly infringed (literally or under the doctrine of equivalents) at least claim 1 of the '298 patent. LG's infringement in this regard is ongoing.

**ANSWER:** Denied.

131. LG has induced end-users and other third parties to directly infringe (literally or under the doctrine of equivalents) the '298 patent by using the Accused Products. LG took active steps, directly or through contractual relationships with others, with the specific intent to cause them to use the Accused Products in a manner that infringes one or more claims of the '298 patent, including, for

example, claim 1 of the '298 patent. Such steps by LG included, among other things, advising or directing end-users and other third parties to use the Accused Products in an infringing manner; advertising and promoting the use of the Accused Products in an infringing manner; or distributing instructions that guide end-users and other third parties to use the Accused Products in an infringing manner. LG performed these steps, which constitute induced infringement with the knowledge of the '298 patent and with the knowledge that the induced acts constitute infringement. LG was aware that the normal and customary use of the Accused Products by others would infringe the '298 patent.

**ANSWER:** Denied.

132. LG has knowledge of the '298 patent at least as of the date when it was notified of the filing of this action.

**ANSWER:** LGEKR admits that it first obtained knowledge of the '298 patent when it was notified of the filing of this action.

133. Furthermore, on information and belief, LG has a policy or practice of not reviewing the patents of others (including instructing its employees to not review the patents of others), and thus has been willfully blind of Plaintiff's patent rights.

**ANSWER:** Paragraph 133 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 133.

134. LG's actions are at least objectively reckless as to the risk of infringing a valid patent and this objective risk was either known or should have been known by LG.

**ANSWER:** Paragraph 134 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 134.

135. LG's direct and indirect infringement of the '298 patent is, has been, and continues to be willful, intentional, deliberate, or in conscious disregard of Plaintiff's rights under the patent.

**ANSWER:** Denied.

136. Plaintiff and/or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '298 patent.

**ANSWER:** Paragraph 136 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 136.

137. Plaintiff has been damaged as a result of the infringing conduct by LG alleged above. Thus, LG is liable to VI in an amount that compensates it for such infringement, which bylaw cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

**ANSWER:** Denied.

138. VI has suffered irreparable harm, through its loss of market share and goodwill, for which there is no adequate remedy at law. VI has and will continue to suffer this harm by virtue of LG's infringement of the '298 patent. LG's actions have interfered with and will interfere with VI's ability to license technology. The balance of hardships favors VI's ability to commercialize its own ideas and technology. The public interest in allowing VI to enforce its right to exclude outweighs other public interests, which supports injunctive relief in this case.

**ANSWER:** Denied.

## **COUNT VI**

### **DIRECT INFRINGEMENT OF U.S. PATENT NO. 9,797,980**

139. VI repeats and re-alleges the allegations in Paragraphs 1-138 as though fully set forth in their entirety.

**ANSWER:** LGEKR repeats and re-alleges its answers to Paragraphs 1-138 to the Complaint.

140. VI owns all substantial rights, interest, and title in and to the '980 patent, including the sole and exclusive right to prosecute this action and enforce the '980 patent against infringers, and to

collect damages for all relevant times. The United States Patent and Trademark Office duly issued the '980 patent on Oct. 24, 2017. A copy of the '980 patent is attached as Exhibit F.

**ANSWER:** LGEKR admits that the '980 patent states on its cover a purported issue date of October 24, 2017. LGEKR also admits that Exhibit F purports to be a copy of the '980 patent. LGEKR lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 140 and therefore denies them.

141. The '980 patent is entitled "Self-Calibrated, Remote Imaging And Data Processing System." The '980 patent describes data collection and processing systems.

**ANSWER:** LGEKR admits that the '980 patent is titled "Self-Calibrated, Remote Imaging And Data Processing System." LGEKR lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 141 and therefore denies them.

142. The claims of the '980 patent are not directed to an abstract idea and they recite an inventive concept.

**ANSWER:** Paragraph 142 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 142.

143. The written description of the '980 patent describes in technical detail each of the limitations of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art at the time of the invention.

**ANSWER:** Paragraph 143 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 143.

144. LG has infringed and continues to infringe the '980 patent by making, having made, using, importing, providing, supplying, distributing, selling, or offering the Accused Products for sale.



**ANSWER:** Denied.

145. The Accused Products include a system for generating a map of a target area.

**ANSWER:** Paragraph 145 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 145.

146. The Accused Products include a global positioning receiver.

**ANSWER:** Paragraph 146 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 146.

147. The Accused Products include an imaging sensor system having a view of the target area.

**ANSWER:** Paragraph 147 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 147.

148. The imaging sensor system includes a rigid mount unit having at least two imaging sensors disposed within the mount unit, wherein a first imaging sensor and a second imaging sensor each has a focal axis passing through an aperture in the mount unit, wherein the first imaging sensor generates a first image area comprising a first data array of pixels and the second imaging sensor generates a second image area comprising a second data array of pixels, wherein the first and second imaging sensors are offset to have a first image overlap area in the target area, wherein the first sensors image data bisects the second sensors image data in the first image overlap area.

**ANSWER:** Paragraph 148 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 148.

149. The imaging sensor system includes a computer in communication with the global positioning antenna, the first imaging sensor, and the second imaging sensor; correlating at least a portion of the image areas from the first imaging sensor and the second imaging sensor to a portion of the target area based on input from the global positioning antenna.

**ANSWER:** Paragraph 150 contains legal conclusions to which no response is required. To the

extent a response is required, LGEKR denies the allegations in Paragraph 150.

150. As described above, LG has directly infringed (literally or under the doctrine of equivalents) at least claim 1 of the '980 patent. LG's infringement in this regard is ongoing.

**ANSWER:** Denied.

151. LG has induced end-users and other third parties to directly infringe (literally or under the doctrine of equivalents) the '980 patent by using the Accused Products. LG took active steps, directly or through contractual relationships with others, with the specific intent to cause them to use the Accused Products in a manner that infringes one or more claims of the '980 patent, including, for example, claim 1 of the '980 patent. Such steps by LG included, among other things, advising or directing end-users and other third parties to use the Accused Products in an infringing manner; advertising and promoting the use of the Accused Products in an infringing manner; or distributing instructions that guide end-users and other third parties to use the Accused Products in an infringing manner. LG performed these steps, which constitute induced infringement with the knowledge of the '980 patent and with the knowledge that the induced acts constitute infringement. LG was aware that the normal and customary use of the Accused Products by others would infringe the '980 patent.

**ANSWER:** Denied.

152. LG has knowledge of the '980 patent at least as of the date when it was notified of the filing of this action.

**ANSWER:** LGEKR admits that it first obtained knowledge of the '980 patent when it was notified of the filing of this action.

153. Furthermore, on information and belief, LG has a policy or practice of not reviewing the patents of others (including instructing its employees to not review the patents of others), and thus has been willfully blind of Plaintiff's patent rights.

**ANSWER:** Paragraph 153 contains legal conclusions to which no response is required. To the

extent a response is required, LGEKR denies the allegations in Paragraph 153.

154. LG's actions are at least objectively reckless as to the risk of infringing a valid patent and this objective risk was either known or should have been known by LG.

**ANSWER:** Paragraph 154 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 154.

155. LG's direct and indirect infringement of the '980 patent is, has been, and continues to be willful, intentional, deliberate, or in conscious disregard of Plaintiff's rights under the patent.

**ANSWER:** Denied.

156. Plaintiff and/or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '980 patent.

**ANSWER:** Paragraph 156 contains legal conclusions to which no response is required. To the extent a response is required, LGEKR denies the allegations in Paragraph 156.

157. Plaintiff has been damaged as a result of the infringing conduct by LG alleged above. Thus, LG is liable to VI in an amount that compensates it for such infringement, which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

**ANSWER:** Denied.

158. VI has suffered irreparable harm, through its loss of market share and goodwill, for which there is no adequate remedy at law. VI has and will continue to suffer this harm by virtue of LG's infringement of the '980 patent. LG's actions have interfered with and will interfere with VI's ability to license technology. The balance of hardships favors VI's ability to commercialize its own ideas and technology. The public interest in allowing VI to enforce its right to exclude outweighs other public interests, which supports injunctive relief in this case.

**ANSWER:** Denied.

### **JURY DEMAND**

Plaintiff's demand for a trial by jury for all issues triable does not state any allegation, and LGEKR is not required to respond.

### **PRAYER FOR RELIEF**

LGEKR denies that Plaintiff is entitled to judgment or to any relief, legal or equitable, and specifically deny that Plaintiff is entitled to each item of relief requested in each of subparagraphs a through g of its Prayer for Relief in the Complaint.

### **GENERAL DENIAL**

Except as explicitly admitted herein, Defendants deny each and every allegation contained in the Complaint.

### **LGEKR'S DEFENSES**

LGEKR alleges and asserts the following defenses in response to the allegations in Plaintiff's Complaint, undertaking the burden of proof only as to those defenses deemed affirmative defenses by law.

#### **FIRST DEFENSE**

##### **(Failure to State a Claim Upon Which Relief Can Be Granted)**

1. Plaintiff's Complaint fails to state a claim upon which relief can be granted.

#### **SECOND DEFENSE**

##### **(Non-Infringement of the Asserted Patents)**

2. LGEKR does not infringe and has not infringed (not directly, contributorily, or by inducement), either literally or under the doctrine of equivalents, and is not liable for infringement of any valid and enforceable claim of the Asserted Patents.

#### **THIRD DEFENSE**

**(Invalidity of the Asserted Patents)**

3. Each claim of each of the Asserted Patents is invalid for failure to satisfy one or more provisions of the patentability requirements, including without limitation §§ 101, 102, 103, and 112.

**FOURTH DEFENSE**

**(Prosecution History Estoppel)**

4. Plaintiff's claims are barred by the doctrine of prosecution history estoppel based on statements, representations, and admissions made during the prosecution of the patent applications resulting in each of the Asserted Patents before the United States Patent and Trademark Office and/or during the prosecution of related patent applications.

**FIFTH DEFENSE**

**(Limitation on Damages)**

5. Plaintiff's claims for relief are statutorily limited in whole or part by Title 35 of the United States Code, including without limitation 35 U.S.C. §§ 286, 287, and/or 288.

**SIXTH DEFENSE**

**(Failure to Mitigate Damages)**

6. Plaintiff's claims of infringement are barred, in whole or in part, by Plaintiff's failure to mitigate damages, at least because Plaintiff unreasonably delayed in filing its claims in this action against LGEKR, and unreasonably delayed in prosecuting the asserted claims against LGEKR after Plaintiff and/or any predecessor-in-interest knew or should have known of the allegedly infringing actions.

**SEVENTH DEFENSE**

**(No Willful Infringement of the Asserted Patents)**

7. Plaintiff is not entitled to enhanced damages under 35 U.S.C. § 284 because LGEKR has not intentionally, willfully, or deliberately infringed any claim of the Asserted Patents or acted

with egregious conduct.

**EIGHTH DEFENSE**

**(No Attorney Fees)**

8. Plaintiff is not entitled to any attorney fees under 35 U.S.C. § 285.

**NINTH DEFENSE**

**(Improper Venue)**

9. Pursuant to Fed. R. Civ. P. 12(b)(3), LGEKR object to venue as improper in this judicial district under 28 U.S.C. § 1400(b), because LGEUS is not incorporated in the State of Texas, and LGEUS does not have a regular and established place of business in this judicial district.

**TENTH DEFENSE**

**(License or Exhaustion)**

10. Plaintiff's claims for relief are barred, in whole or in part, by the doctrines of exhaustion, first sale, license, implied license, full compensation, or restrictions against double recovery.

**ELEVENTH DEFENSE**

**(Ensnarement)**

11. Plaintiff's claims of infringement under the doctrine of equivalents, if any, are barre under the doctrine of ensnarement.

**OTHER DEFENSES**

12. LGEKR's investigation is ongoing and LGEKR has not yet obtained discovery from Plaintiff, the prosecuting attorneys, or third parties. LGEKR reserves the right to amend its Answer to include other defenses that LGEKR may learn of during the course of their investigation and after obtaining discovery from Plaintiff, the prosecuting attorneys, and third parties.

Dated: July 21, 2021

By: /s/ Janis E. Clements  
Janis E. Clements  
Texas Bar. No. 04365500  
GREENBERG TRAURIG, LLP  
300 West 6<sup>th</sup> Street, Suite 2050  
Austin, TX 78701  
Telephone: (512) 320-7200  
Facsimile: (512) 320-7210  
Email: clements@gtlaw.com

Richard A. Edlin (*pro hac vice* to be filed)  
Elana B. Araj (*pro hac vice* to be filed)  
GREENBERG TRAURIG, LLP  
MetLife Building, 200 Park Avenue  
New York, NY 10002  
Telephone: (212) 801-9200  
Facsimile: (212) 801-6400  
Email: edlinr@gtlaw.com  
Email: araje@gtlaw.com

Vivian S. Kuo (*pro hac vice* to be filed)  
GREENBERG TRAURIG, LLP  
2101 L Street NW, Suite 1000  
Washington, DC 20037  
Telephone: (202) 331-3158  
Email: kuov@gtlaw.com

Andrew R. Sommer (*pro hac vice* to be filed)  
GREENBERG TRAURIG, LLP  
1750 Tysons Boulevard, Suite 1000  
McLean, VA 22102  
Telephone: (703) 749-1370  
Email: sommera@gtlaw.com

*Attorneys for Defendant LG Electronics Inc.*

**CERTIFICATE OF SERVICE**

I hereby certify that a true and correct copy of the foregoing document was electronically filed with the Court and that all counsel of record who are deemed to have consented to electronic service in the above-referenced case are being served this 21st day of July, 2021, with a copy of the above-document via the Court's CM/ECF System.

/s/ Janis E. Clements  
Janis E. Clements